Dipkumar Patel

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Education

Ahmedabad University
B.Tech in ICT
2015-2019
CGPA: 3.63/4.33 (upto 7th SEM)

Links

Github:// **immortal3**

Coursework

Coursera
Deep Learning Specialization (all 5 courses)

Undergraduate
Machine Learning
Computer Vision
Introduction to Blockchain
Cloud Computing
High Performance Computing
Information System Security

Skills

Programming
• Python, C/C++, JavaScript, Java, MySQL

Libraries
• Tensorflow, Pytorch, Opencv, Keras, Pandas

Software
• git, MATLAB, Xilinx ISE

Platform
• Linux, Window

Experience

Embedded Analytics LLP | Machine Learning Intern
Jan 2019 - Ongoing | Ahmedabad, India
Near Duplicate video search in a massive database of videos
• Working on the final semester project to provide a portal for reverse video-search. The project focuses on improving signature extraction from video and faster retrieval of similar signature.
• Implementation using OpenCV, Flask, and Postgresql (CUBE Extension).

Fusion Informatics | Computer Vision Intern
May 2018 - June 2018 | Ahmedabad, India
Artificial Intelligence driven CCTV surveillance
• Created CCTV surveillance software for classification and localization of human with a weapon(knife and pistol), fire, and smoke.
• Other features include identifying previously detected human with a weapon, support for multiple cameras including IP cameras and email alerts.

Publication

• Raj Dhamsaniya, **Dipkumar** and Harshkumar Patel. MMPL (Medicine Multi-Participant Ledger) at International Workshop on Blockchain Technologies (IWBT 2018), NIT Warangal. (Accepted)

Projects

Image Saliency Detection | link
• As Human, We only focus on certain part of Image which is called salient region. This Project predicts Saliency map of given Image which is useful in many areas like Robotics, Image-aware editing, caption generation, fast-response systems.

Autoencoder Based Communication System | link
• Implementation of Novel Deep Learning based End-to-End communication System which can outperform state-of-the-art modulation Schemes. Autoencoder is used to tackle noise of channel in communication through end-to-end learning.

Binary Gender Classification from Facial Image | live demo
• A project on determining the gender of a person form live surveillance feed as well as images. Implemented Compact CNN (Convolutional Neural Network) and gained F1-score of 0.94 with real-time performance. Trained model was converted into tensorflow.js compatible for client-side deployment.

File System (EbFs) | link
• Created Portable and secure hierarchical File System from scratch. EbFs is inspired by ext2fs (Linux file system) which used inode for storing meta-data.

Honors and Achievement

Winner of Ingenious Hackathon 2017
• Created Application in 24-hour which can detect user's different hand gestures. Different action(e.g. pause/play music) can be performed using hand gestures.